

IN THE SPECIFICATION

Please amend the specification as follows:

Insert the following paragraphs after page 17, line 36:

To a mixture of 750 mL *tert*-butanol and 2250 mL water, 200 g (1.488 mol) of 5-ethyl-2-vinyl-pyridine was dissolved and under stirring 324 g (1.786 mol) N-bromosuccinimide was added in 30 min. at 25- 30 °C. Stirring was continued for 1 hr. and 178.6 g (4.46 mol) of NaOH dissolved in 2250 mL water was added into it. Reaction mixture was stirred for 45 min. Product was extracted twice with 1100 mL methyl *tert*-butyl ether. Organic layers were combined, washed with brine, dried over magnesium sulfate and concentrated in vacuo to yield 206.13 g (92 %) of 6.

The product obtained was characterized by IR, Mass, ¹³C NMR and ¹H NMR is identical in every respect with the product of example 7.

EXAMPLE 16

5-Ethyl-2-oxiranyl-pyridine (6)

To a stirred solution of 400 g (2.974 mol) 5-ethyl-2-vinyl-pyridine dissolved in a mixture of 1000 mL of dimethyl sulfoxide and 106 mL water, was added 741.9 g (4.16 mol) N-bromosuccinimide at 0 to -5 °C. Reaction mixture was stirred for 1 hr. The progress of reaction was monitored by TLC and after complete consumption of 5-ethyl-2-vinyl-pyridine, 833 g (6.015 mol) of K₂CO₃ along with 400 mL methanol was added at 25-30 °C. Stirring was continued for 1 hr. and after subsequent work-up 358.49 g (80 %) of the desired product was obtained.

The product obtained was characterized by IR, Mass, ¹³C NMR and ¹H NMR, which was found to be identical with the product obtained in example 7.

EXAMPLE 17

4-[2-(5-Ethyl-pyridin-2-yl)-2-hydroxy-ethoxy]-benzaldehyde (9a)

11.35 g (0.283 mol) of sodium hydride in 10 mL dimethylformamide was added into a solution of 19.27 g (0.158 mol) of 4-hydroxy benzaldehyde dissolved in 100 mL dimethylformamide and stirred for 5 min. To this was added 30 g (0.129 mol) of 2-bromo-1-(5-ethyl-pyridin-2-yl)-ethanol dissolved in 1000 mL dimethylformamide slowly and stirring was continued for 1 hr. at 25 to 30 °C. Reaction mixture was heated at 80 to 90 °C for 14 hr., cooled to 25 °C and poured in excess of water. Product was extracted with diethyl ether. Diethyl ether layer was dried (magnesium sulfate) and concentrated to obtain 30.04 g (85 %) of crude product.

Insert the following paragraphs after page 21, line 32:

EXAMPLE 24

4-[2-(5-Ethyl-pyridin-2-yl)-2-hydroxy-ethoxy]-benzaldehyde (9a)

Into a solution of 9.635 kg (72.99 mol) of 4-hydroxy benzaldehyde dissolved in 50 lit. dimethylformamide was added 5.675 kg (236.45 mol) of sodium hydride in 5 lit. dimethylformamide and stirred for 15 min. To this was added 15 Kg (65.22 mol) of 2-bromo-1-(5-ethyl pyridin-2-yl)-ethanol dissolved in 500 lit dimethylformamide and stirring was continued for 1 hr. at 25 to 30 °C. Reaction mixture was heated at 80 to 90 °C for 14 hr., allowed to cool to 25 °C and excess of water was added into it. Product was extracted with diethyl ether. Organic layer was dried (magnesium sulfate) and concentrated to obtain crude product, which was purified in methyl *tert*-butyl ether as described in example 17 to obtain 12.195 Kg (69 %) pure 4-[2-(5-ethyl-pyridin-2-yl)-2-hydroxy-ethoxy]-benzaldehyde. m.p. 83 °C

The impurity profile in this reaction was similar to the impurity profile of example 17.

EXAMPLE 25

4-[2-(5-Ethyl-pyridin-2-yl)-2-hydroxy-ethoxy]-benzaldehyde (9a)

To a flask fitted with an overhead stirrer, a thermometer and a condenser was added 500 g (3.759 mol) 5-ethyl-2-vinyl-pyridine dissolved in 7500 mL of 25 % aqueous tertiary butanol. To this was added 802 g (4.5 mol) N-bromosuccinimide at 25 – 30 °C in 30

min. Reaction mixture was stirred for 2 hr. The progress of reaction was monitored by TLC and after complete consumption of the 5-ethyl-2-vinyl-pyridine, 762 g (5.52 mol) of K_2CO_3 was added in one lot along with 537 g (4.4 mol) 4 - hydroxy benzaldehyde. Reaction mixture was stirred for 18 hr. at 75-80 $^{\circ}C$. Subsequent work-up in water, extraction with ethyl acetate and purification yielded 805 g (79 %) of the titled product. m.p. 83 $^{\circ}C$

The product obtained was characterized by IR, Mass, ^{13}C NMR and 1H NMR, which was found to be identical with the product obtained in example 17. The impurity profile in this reaction was similar to the impurity profile of example 17.

EXAMPLE 26

4-[2-(5-Ethyl-pyridin-2-yl)-2-hydroxy-ethoxy]-benzaldehyde (9a)

Insert the following paragraphs after page 29, line 20:

EXAMPLE 38

5-{4-[2-(5-Ethyl-pyridin-2-yl)-2-hydroxy-ethoxy]-benzyl}-2,4-thiazolidene dione (14, X = OH)

30 g (0.0794 mol) 5-{4-[2-(5-ethyl-pyridin-2-yl)-2-hydroxy-ethoxy]-benzylidene}-2,4-thiazolidene dione was dissolved in 210 mL water. To this was added a mixture of 6.42 (0.0553 mol) g DMG and 2.62 g (0.011 mol) $CoCl_2 \cdot 6H_2O$ dissolved in 60 mL DMF at 65-70 $^{\circ}C$, followed by slow addition of 12.33 (0.3332 mol) g sodium borohydride dissolved in 90 mL cold water at 70-85 $^{\circ}C$. After complete addition of sodium borohydride, reaction mixture was stirred at 65-70 $^{\circ}C$ for 4 hr. To reaction mixture excess water was added and product was extracted with chloroform. Organic layer was separated, dried (calcium chloride) and concentrated under reduced pressure to afford 28.35 g (94 %) white product. m.p. 119 $^{\circ}C$

The product obtained was characterized by IR, Mass, ^{13}C NMR, and 1H NMR, which was found to be identical with the product obtained in example 37.

EXAMPLE 39

5-{4-[2-(5-Ethyl-pyridin-2-yl)-2-hydroxy-ethoxy]-benzyl}-2,4-thiazolidene dione (14, X = OH)

Into 115 mL of water, 10 g (0.0256 mol) 5-{4-[2-(5-ethyl-pyridin-2-yl)-2-hydroxy-ethoxy]-benzylidene}-2,4-thiazolidene dione, 0.62 g (0.0053 mol) DMG and 0.038 g (0.0001 mol) $\text{CoCl}_2 \cdot 6\text{H}_2\text{O}$ dissolved in 20 mL DMF were added at 65-70 $^{\circ}\text{C}$. To this 4.56 g (0.1232 mol) sodium borohydride in 35 mL cold water was added slowly at 70-75 $^{\circ}\text{C}$. After complete addition of sodium borohydride, reaction mixture was stirred at 65-70 $^{\circ}\text{C}$ for 4 hr. and poured into excess of water. Product was extracted with chloroform. Layers were separated, organic layer was dried and concentrated under reduced pressure to obtain white product. The product was recrystallized by a mixture of 0.5 v/wt ethanol and 15 v/wt diisopropyl ether. Yield of the product was 9.45 g (94 %). m.p. 119 $^{\circ}\text{C}$

The product obtained was characterized by IR, Mass, ^{13}C NMR, and ^1H NMR, which was found to be identical with the product obtained in example 37.